

## REMARKS

Claims 1-13 remain for further consideration. No new matter has been added.

The objections and rejections shall be taken up in the order presented in the Official Action.

1. Claims 1-13 are indeed currently pending.

2-3. Claims 8-9 and 11-12 currently stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of co-pending application serial number 09/876,547 (hereinafter the "'547 Application").

An executed terminal disclaimer is enclosed herewith. The issue fee for the '547 Application was submitted to the USPTO on March 2, 2006.

4. Claims 10 and 13 currently stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of the '547 Application.

An executed terminal disclaimer is enclosed herewith. The issue fee for the '547 Application was submitted to the USPTO on March 2, 2006.

5. Claims 1-6 currently stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 3 of the '547 Application.

An executed terminal disclaimer is enclosed herewith. The issue fee for the '547 Application was submitted to the USPTO on March 2, 2006.

6-7. Claims 1-13 currently stand rejected for allegedly being obvious in view of published U.S. application 2002/0172275 to Birru (hereinafter “Birru”) in view of Applicant’s Admitted Prior Art (AAPA).

It is recognized that Birru fails to disclose a Viterbi decoder having sixteen (16) and the decision feedback equalizer having more than 16 taps and a mapper element between the decoder and the decision feedback element. (see Official Action, pg. 7, lines 4-7). It is then alleged that AAPA discloses decoding data in a digital wireless communication system using a Viterbi decoder, discloses a trellis encoder to include a symbol mapper, and further discloses the Viterbi decoder includes a number of stages, most often 16 or 24. (see Official Action, pg. 7, lines 8-18). It is then abruptly concluded that *“it would have been obvious to one of ordinary skill in the art at the time of the invention that Thomas teaches implementing a Viterbi decoder comprising 16 stages and a mapper so as to generate a mapped scaled output and this can be implemented in the adaptive equalizer as described in Birru such that the taps of the decision feed back equalizer receive as input the mapper output from the respective stages of the [V]iterbi decoder so as to compare[] the decoded/recoded data to the encoded received data so as to avoid error propagation with the data packet.”* (Official Action, pg. 7, line 18 – pg. 8, line 3). It is understood that although the Official Action refers to Thomas, that the Official Action meant to refer to AAPA rather than Thomas. It is further alleged that using a decoder with sixteen stages and the decision feedback equalizer with more than 16 taps or fewer than sixteen taps depending on the complexity desired in implementing the desired equalizer. (Official Action, pg. 8, lines 3-7). It is respectfully submitted that a prima facie case of obviousness has not been presented.

Specifically, the Official Action is lacking the necessary factual, nonclusionary statement regarding why a skilled person at the time of the invention would have combined the references as

alleged. *“Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching suggestion or incentive supporting the combination.”* In re Geiger, 2 U.S.P.Q.2d 1276, 1278 (Fed. Cir. 1987). *“Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, ‘[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.’”* In re Laskowski, 10 U.S.P.Q.2d 1397, 1398 (Fed. Cir. 1989), citing In re Gordon, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984). In addition, *“[w]hen the incentive to combine the teachings of the references is not readily apparent, it is the duty of the examiner to explain why the combination of the reference teachings is proper.”* Ex parte Stone, 2 U.S.P.Q.2d 1788, 1790 (Bd.App. & Int’f 1986) (emphasis added).

As noted above, it is fundamental that obviousness can not be established absent some teaching to combine the references, or a suggestion or incentive supporting the combination of references. See In re Geiger, at 1278 (Fed. Cir. 1987). In the instant case the Official Action is lacking the necessary factual, non-conclusionary explanation why the combination of the Birru and APPA is proper. Hence, it is respectfully submitted that a prima facie case of obviousness has not been presented since there is no proper teaching, suggestion or incentive that would lead one of ordinary skill in the art to modify Birru based upon the teachings of AAPA to create the claimed invention. The Official Action fails to provide any evidence or reasonable rationale regarding why the sixteen stages is simply a design choice as alleged in the Official Action. The undersigned is unwilling to accept such an allegation regarding the design choice as judicial notice. The Official Action fails to provide any evidence or reasonable rationale regarding why the sixteen stages is simply a design choice as alleged in the Official Action.

In addition, the Official Action alleges that a skilled person would have been motivated to modify Birru based upon the alleged AAPA in order to “...*avoid error propagation within the data packet.*” (Official Action, pg. 8, lines 2-3). Noticeably missing from the Official Action is a cite to the prior art from which this motivation is being drawn from. This alleged motivation to combine is tainted with insidious hindsight and the Official Action is devoid of any non-conclusionary reasoned statement to support the abrupt contention that a person of ordinary skill would have motivated to modify Birru based upon the alleged AAPA. Hence, it is respectfully submitted that a prima facie case of obviousness has not been presented since there is no proper teaching, suggestion or incentive that would lead one of ordinary skill in the art to modify Birru based upon the teachings of AAPA to create the claimed invention.

Reconsideration and allowance of claims 1-13 is respectfully requested. No new matter has been added.

If a telephone interview could assist in the prosecution of this application, please call the undersigned attorney.

Respectfully submitted,



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